EXPLORE MORE
For more information on NASA and its Journey to Mars, visit these websites:
http://mars.nasa.gov
http://marsmobile.jpl.nasa.gov
http://mars.nasa.gov/msl/mission/communicationwithearth/communication
http://mars.nasa.gov/mer/mission/comm_orbiters.html
http://mars.nasa.gov/files/resources/MarsAsArt_Booklet.pdf
http://mars.nasa.gov/participate/funzone
http://www.nasa.gov/education

Surviving and Thriving on Mars
Explorer Activities

Ages 5-12
Canyon Junction on Mars

Mars canyons meet to form a depression 4,000 meters (13,000 feet) deep.

Image Credit: NASA/JPL-Caltech/University of Arizona
MISSION CONTROL FOR MARS

Color the operations center

MARS FUN FACTS

Color Mars and Mars' two Moons

• Mars is 142 million miles from the Sun.
• Mars speed in orbiting the Sun is 14.5 miles per second.
• Mars diameter is 4,220 miles and Mars tilt of axis is 25 degrees.
• The length of year for Mars is 687 Earth Days.
• The length of day for Mars is 24 hours 37 minutes.
• Mars gravity is 0.375 that of Earth.
• Mars temperature is average: -81 degrees F.
• Mars atmosphere is mostly carbon dioxide, some water and vapor.
• Mars has two moons Phobos and Deimos.

The operation center and the people there will be an important part of the Mars team.
MAVEN AT MARS
Find and circle 8 things that are different

COMMUNICATING WITH MARS
Match the number with the correct communication device


The benefits of using the orbiting spacecraft are that the orbiters are closer to the rover than the Deep Space Network (DSN) Antennas on Earth and the orbiters have Earth in their field of view for much longer time periods than the rover on the ground.
FOLLOW YOUR CURIOSITY
Find and circle these shapes

ON TO MARS
Color - by - number rocket

1 - Orange  2 - Grey  3 - Green  4 - Blue  5 - Yellow  6 - Light Blue
SATELLITES SENT TO MARS

Unscramble the letters to find the words

NREMARI

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GKINVI

---------

AENMV

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SAMR SAECRONASNNCEI RBOIRTE

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SURVIVING ON MARS

Circle “mars” each time you find it. How many were there?

fsryomzymb

dsramataxr

zriakxrrsm

muodmsbruk

marssdsanab

virizmrrmq

yszsmqmaxh

zrrmoartmb

zasnaxrtdr

mmdzirgsam

pwfmarsmcy

Answer: 12
TOP 10 WAYS ISS IS HELPING GET US TO MARS

Alphabetize these ISS related words

1. ______________________ 6. ______________________
2. ______________________ 7. ______________________
3. ______________________ 8. ______________________
4. ______________________ 9. ______________________
5. ______________________ 10. ______________________

TRAVEL TO MARS
Get the Astronaut to Mars
CURIOSITY
Circle the rover that is different from the rest

SURVIVING AND THRIVING
Draw three crops to plant in the greenhouse habitat on Mars
THE FIRST HUMAN ON MARS WILL NEED...

Unscramble the letters to find the words

IRA

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AOCTIOMUNICNM

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LETERHS

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ETAWR

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ODFO

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air, carbon dioxide, curiosity, earth, first humans, food, habitat, landers, mariner, maven, nasa, opportunity, orbit, people, phoenix lander, radiation shielding, rovers, sojourner, spirit, surviving, thriving, viking, viking landers, water, water vapor

sojourner

spirit

surviving

thriving

viking

viking landers

water

water vapor
MATCH THE SIZES
Draw a line between each body and its equatorial diameter

Earth’s Moon

SOON WE WILL SEND...
Circle one image that will visit Mars

Earth

Mars